field darker, lines indistinct, indicated by difference of tint on either side; first line curved; basal space paler, with a darker patch on the inner margin near the base; second line running at first slightly outward, then parallel to the hind margin, then inwards to beneath the reniform stigma, and lastly vertical to the inner margin; the two stigmata dark, with the space between them paler; the second line is followed by a pale space on costa and sometimes also on the inner margin; a line of black dashes before the fringes, which are silky ochreous. Hind wing greyish fuscous, with faint indications of a paler submarginal band.

In the single female the darker tints throughout are almost black, the paler spaces being by contrast whiter; but this may not be a sexual peculiarity.

Expanse of wings 16 millim.

One female, two males, from S. Lorenzo Island, Callao.

Tritæa ferruginea, sp. n.

Fore wings reddish ochreous, somewhat iridescent, with faint indications of two stigmata and an outer line, which are darker; a row of dark spots along the hind margin. Hind wings glossy, pale ochreous, darker towards the hind margin, showing a faintly darker submarginal band, which forms a darker spot towards the anal angle.

Expanse of wings 16 millim.

One male from Coquimbo.

[To be continued.]

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

November 11, 1891.—Sir Archibald Geikie, D.Sc., LL.D., F.R.S., President, in the Chair.

The following communication was read :---

"On *Dacrytherium ovinum* from the Isle of Wight and Quercy." By R. Lydekker, Esq., B.A., F.G.S.

The Author described a cranium and mandible of *Dacrytherium Cayluxi* from the Quercy Phosphorites, which proved the identity of this form with the *Dichobune ovina* of Owen from the Oligocene of the 1sle of Wight. The species should thus be known as *Dacrytherium ovinum*. It was shown that the mandible referred by Filhol to *D. Cayluxi* belongs to another animal.

Geological Society.

November 25, 1891.—Sir Archibald Geikie, D.Sc., LL.D., F.R.S., President, in the Chair.

The following communication was read :---

"On the Os public of *Polacanthus Foxi.*" By Prof. H. G. Seeley, F.R.S., F.G.S.

Hitherto the evidence of the systematic position of *Polacanthus* has not been very precise. The Author has detected the missing pubis as an isolated specimen. This he regards as the anterior portion of the left pubis, and appends a full description of the bone. He furthermore gives a critical account of our knowledge of other pelvie bones of the genus, and is led to associate *Agathaumus*, *Cratæomus*, *Omosaurus*, and *Polacanthus* in near alliance, in the Seelidosaurian division of the Order *Ornithischia*.

December 23, 1891.—W. H. Hudleston, Esq., M.A., F.R.S., Vice-President, in the Chair.

The following communication was read :---

"On Part of the Pelvis of *Polacanthus.*" By R. Lydekker, Esq., B.A., F.G.S.

The specimen described in this paper was acquired by the British Mnseum from the collection of the late Mr. Beckles, and is from the Wealden, probably of the Isle of Wight. It is the central part of a Dinosaurian ilium, with portions of sacral ribs attached.

The point of special interest is a flat plate of bone, evidently a portion of dermal armour, resting on the upper border of the ilium; and this suggests comparison of the specimen with the dorsal shield of *Polacanthus Fo.cii*. Such a comparison shows that the present specimen belonged to a Dinosaur closely allied to, if not identical with, *P. Fo.cii*.

January 6, 1892.-W. H. Hudleston, Esq., M.A., F.R.S., Vice-President, in the Chair.

The following communications were read :---

1. "On a new Form of Agelacrinites (Lepidodiscus Milleri, n. sp.) from the Lower Carboniferous Limestone of Cumberland." By G. Sharman, Esq., and E. T. Newton, Esq., F.G.S.

Among a large series of fossils obtained during the Geological Survey of Cumberland and Northumberland, there are two which are referable to that remarkable and rare group of Echinoderms, the Agelacrinitidæ. The more perfect of these specimens is from the Lower Carboniferous rocks near Waterhead, on the River Irthing, and forms the subject of this communication. The disclike fossil is only about four-tenths of an inch in diameter, and scarcely rises above the shell to which it is attached ; nevertheless, it is so well preserved as to allow much of its structure to be studied. It is referred to the genus *Lepidodiscus*, and is seemingly closely

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related to *L. Lebouri*, described by Mr. Percy Sladen before this Society in 1879; but it also has affinities with *L. cincinnatiensis* and *L. squamosus*. From all these, however, the present specimen differs in having the pyramid in the middle of the interradial space, in possessing shorter arms, and in being much smaller. This fossil is to be named *Lepidodiscus Milleri*, after Mr. Hugh Miller, under whose direction these fossils were collected by Mr. J. Rhodes.

2. "Archaopneustes abruptus, a new Genus and Species of Echinoid from the Oceanie Series in Barbados." By J. W. Gregory, Esq., B.Se., F.G.S.

This genus belongs to a group of Echinoidea which has given some trouble to systemiatists, owing to the union of the characters of the orders Cassiduloidea and Spatangoidea; the other genera belonging to the group are Asterostoma, Pseudasterostoma, and Palacopneustes. The evidence of the new Echinoid throws light upon the affinities of these genera. The main points suggested by a study of the new species are :--(1) the abandonment of the name Pseudasterostoma as a synonym of Palacopneustes; and (2) the inclusion of the true Asterostoma, Pulacopneustes, and Archeopneustes. in the Adete Spatangoidea, whereby the Plesiospatangidæ are left as a more homogeneous family, though bereft of the chief interest assigned to it.

A tabular summary of the nomenclature of the group is given.

The best-known fossil species of Asterostoma and Palacopneustes occur in Cuba, in deposits referred to the Cretaceous owing to the resemblance of these Echinoids to the common Chalk Echinocorys scutatus. The new genus includes a species from the same deposit, which is probably of the same age as the Bissex Hill rock from which the new species was obtained; this is at the top of the Oceanic Series, and belongs to the close of the great subsidence.

MISCELLANEOUS.

Note on Abnormalities in the Craufish (Astacus fluviatilis). By W. N. PARKER, Ph.D.

WHILE a number of crayfishes were being dissected by my students last month I noticed that three of the specimens presented certain abnormalities which, although perhaps not so interesting as the case recently described in this Journal by Benham*, are probably worthy of record.

Specimen I.—On the left side, in addition to the normal pleurobranch of segment 13, a small but well-developed gill was present on the wall of segment 12 in place of the usual rudimentary style. This gill was about three quarters as long as the pleurobranch normally present.

Specimen II.—The last arthrobranch of the left side, *i. e.* the * "Note on a Couple of Abnormalities," 'Annals,' ser. 6, vol. vii. no. 39, March 1891, p. 256.